

Region 6 - Enforcement & Compliance Assurance Division
INSPECTION REPORT

Inspection Date(s):	03/1/2023	
Media Program:	Water	
Regulatory Program(s)	SDWA-PWS	
Company Name:	D & M Water Supply Corporation (WSC)	
Facility Name:	D & M WSC	
Facility Physical Location:	111 Buck Alley	
(city, state, zip code)	Douglass, TX 75943	
Mailing address:	PO Box 9	
(city, state, zip code)	Douglass, TX 75943	
County/Parish:	Nacogdoches County	
Facility Phone Number	936-559-9900	
Facility Contact:	Robert Shumate	Head Operator
	rshumate.dmwsc@gmail.com	
FRS Number:		
Identification/Permit Number:		
Media Identifier Number:	TX1740010	
NAICS:		
SIC:		
Personnel participating in inspection:		
Jessica Moore	ECDWR	Lead Inspector
Sami Doupnik	ECDWR	Inspector
Robert Shumate	D & M WSC	Head Operator
Sherri Read	D & M WSC	Office Manager
EPA Lead Inspector Signature/Date		4/17/2023
	Jessica Moore	Date
Supervisor Signature/Date	CURRY JONES Digitally signed by CURRY JONES Date: 2023.04.17 22:46:29 -05'00'	4/17/2023
	Curry Jones	Date

Section I – INTRODUCTION

PURPOSE OF THE INSPECTION

EPA Region 6 inspectors Jessica Moore and Sami Doupnik arrived at D & M WSC at 10:00 am on 03/01/2023 for an announced inspection. D & M agreed to participate in a training exercise conducted by the National Enforcement Investigation Center (NEIC) and EPA Region 6 for roughly 25 inspectors from Oklahoma, Texas, Louisiana, and EPA Region 6. We met with Robert Shumate, Lead Operator, and Sherri Read, Office Manager. I presented my credentials to Mr. Shumate and informed him that this was an EPA inspection to determine compliance with the Safe Drinking Water Act and train new state and federal inspectors. The scope of the inspection is to inspect the physical water plants and associated storage facilities. The inspection is not a full Sanitary Survey, nor does it take the place of the Texas Commission on Environmental Quality Comprehensive Compliance Investigations, performed triennially. The training specifically focused on evaluating Disinfection By-Product reduction for water systems.

FACILITY DESCRIPTION

D & M WSC purchases water from the City of Nacogdoches and provides water through groundwater wells. The water system provides treated, filtered surface water purchased from Nacogdoches to ten pressure planes, and groundwater to eight pressure planes through four drinking water wells. The inspection centered on the Douglass, Eden, and Alazan Plants. The Douglass Plant consists of Well No. 7, Well No. 6 (inactive), a 0.125 MG ground storage tank, three service pumps, one 0.010 MG pressure tank and a generator. The plant utilizes gas chlorine for disinfection. The Eden plant consists of Well No. 8, a 0.25 MG ground storage tank, three service pumps, and two 0.0054 MG pressure tanks. The Eden plant utilizes polyphosphate for sequestration and gas chlorination for disinfection. The Alazan Plant consists of Well No. 1, a 0.25 MG ground storage tank, two or three service pumps, a 0.010 MG pressure tank, and a generator. The Alazan Plant utilizes polyphosphate for sequestration, caustic soda for pH control, and gas chlorination for disinfection.

The water system employs one Class A operator and 3-4 assistant operators. The head operator is retiring in the second quarter of 2023. His replacement was unknown at the time of the inspection.

Section II – OBSERVATIONS

The training group visited three of the groundwater plants for the purpose of the inspection. The observations are limited to the three groundwater plants and the Emergency Response and Risk and Resiliency plans EPA administers through America's Water Infrastructure Act (AWIA).

Douglass Plant Observations

- I observed an open hole where the electrical wire enters the well (Photo 2)
- I observed open holes in the electrical conduit (Photo 3)
- The well had some area of insulation removed to access well (Photo 4)

- We observed a flap style cover on the storage tank overflow. Seal appeared airtight at time of inspection, however small amount of rust and corrosion was showing (Photo 5)
- We observed a hole in the side of the insulation of the bottom of the ground storage tank. Unable to observe where hole led to (Photo 6)
- We observed ammonia being stored in the chlorine room at the treatment plant (Photo 7)
- We observed a pressure tank with a new air relief valve in the open position on the top of the storage tank (Photo 8 and 9)
- We observed a diesel generator onsite for the well. We were informed that over the last freeze the water system maintained running water through the last two heavy freezes but did have pressure issues

Eden Plant Observations

- We were informed the well at this location was two years old and was drilled following a collapse
- We observed a heavily insulated well and well pad that was consistent with recent construction (Photo 10)
- We observed the chemical injection point marked by multiple large rocks and were informed rocks were to prevent mowing accidents (Photo 11)
- We observed areas of the ground storage tank foundation being eroded (Photo 12)
- We observed staining and erosion from supporting gravel and rock from the storage tank overflow (Photo 13)
- We observed erosion of the foundation gravel around the bottom of the tank on all sides of the tank (Photo 14)
- We observed ammonia in the chlorine room of the water plant at this location
- We observed a polyphosphate tank in a secondary containment bin of unknown capacity (Photo 15)

Alazan Plant Observations

- We observed one well supplying the Alazan plant (Photo 16)
- We observed an opening around the electrical conduit on the well (Photo 17)
- We observed corrosion on the top part of the overflow of the ground storage tank where it met the pipe coming directly from the tank (Photos 18-20)
- We observed a large amount of corrosion at the base of the overflow for the ground storage tank. There were also many dead bugs in the overflow indicating the seal is not air tight (Photos 21-24)
- We observed the fan in the chlorine room pulling air into the chlorine room (Photo 25)
- We observed operation and maintenance information written directly on pump (Photo 26)
- We observed a double wall storage tank in the chemical storage room on an elevated platform (Photo 27)
- We observed a large tank in secondary containment but volume of secondary containment unknown (Photo 29)
- We observed a key in the door of the chemical storage room that had been painted and rusted into the lock (Photo 28)

Emergency Response and Risk and Resiliency Plans

- We observed the completed plans certified by the water system per the requirements of the American Water Infrastructure Act
- We reviewed the plans against the small systems checklist published by EPA
- We observed many of the elements to be complete
- We observed the monitoring and sampling plan was absent from the document

Section III – AREAS OF CONCERN

Douglass Plant Areas of Concern (AOC)

- The electrical conduit box had four holes on the back of the panel that were open to the air
- The electrical conduit into the well was open which could be a potential path for contamination
- We were unable to confirm where hole in insulation on the side of the ground storage tank led
- Ammonia should not be stored inside of the chlorine room

Eden Plant AOCs

- Several areas around the base of the ground storage tank had areas where the gravel is eroding, at times under the tank at least the length of a pen
- The ammonia was stored inside the chlorine room at the plant

Alazan Plant AOCs

- The electrical conduit into the well was open which could be a potential path for contamination
- The overflow had significant corrosion throughout the pipe. Very significant corrosion was seen at the top of the pipe and at the outflow with numerous dead bugs in the pipe. The seal was not air/water tight since bugs were able to access the inside of the pipe.
- The exhaust fan in the chlorine room was blowing air into the room instead of pushing air out as designed. This would not clear out a potential chlorine leak
- Recording maintenance information directly onto a pump is easily lost through pump maintenance such as painting
- We were unable to determine if the secondary containment of the single walled chemical tank was sufficient
- The key in the door of the chemical room is a security concern since it has been left in the door long term

Emergency Response and Risk and Resiliency Plans AOCs

- The sampling plan was not present in the document, water system noted it would be added by reference

EPA Region 6 inspectors Jessica Moore and the training group conducted a closing conference at D & M WSC at 15:00 on March 1, 2023, for the inspection. During the closing conference, Jessica Moore reviewed the 12 Areas of Concern noted during the inspection.

Section IV – FOLLOW UP

No additional information was received by EPA after exiting the Facility on March 1, 2023.

Section V – LIST OF APPENDICES

Appendix 1 – Photo Log – 29 photos taken 03/01/2023

Appendix 2 – Sign In Sheet From Inspection

Appendix 1

Photographic Log



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Photograph Log

Photo No. 1

Location: D & M WSC TX1740010		
City: Douglass	County/Parish: Nacogdoches	State: Texas



Photo File Name: DSCN1547

Date of Photo: 03/01/2023

Time of Photo: 10:42

Photographer: Sami Doupnik

Description: Map of D & M WSC



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Photograph Log

Photo No. 2

Location: D & M WSC TX1740010		
City: Douglass	County/Parish: Nacogdoches	State: Texas



Photo File Name: DSCN1548

Date of Photo: 03/01/2023

Time of Photo: 10:46

Photographer: Sami Doupnik

Description: Hole in electrical conduit on well casing



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Photograph Log

Photo No. 3

Location: D & M WSC TX1740010		
City: Douglass	County/Parish: Nacogdoches	State: Texas



Photo File Name: DSCN1549

Date of Photo: 03/01/2023

Time of Photo: 10:46

Photographer: Sami Doupnik

Description: Holes in electrical box



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Photograph Log

Photo No. 4

Location: D & M WSC TX1740010		
City: Douglass	County/Parish: Nacogdoches	State: Texas



Photo File Name: DSCN1550

Date of Photo: 03/01/2023

Time of Photo: 10:54

Photographer: Sami Doupnik

Description: Douglass Well



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Photograph Log

Photo No. 5

Location: D & M WSC TX1740010		
City: Douglass	County/Parish: Nacogdoches	State: Texas



Photo File Name: DSCN1551

Date of Photo: 03/01/2023

Time of Photo: 10:57

Photographer: Sami Doupnik

Description: Seal at bottom of ground storage tank overflow



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Photograph Log

Photo No. 6

Location: D & M WSC TX1740010		
City: Douglass	County/Parish: Nacogdoches	State: Texas



Photo File Name: DSCN1552

Date of Photo: 03/01/2023

Time of Photo: 10:58

Photographer: Sami Doupnik

Description: Hole in insulation connected to the ground storage tank



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Photograph Log

Photo No. 7

Location: D & M WSC TX1740010		
City: Douglass	County/Parish: Nacogdoches	State: Texas



Photo File Name: DSCN1553

Date of Photo: 03/01/2023

Time of Photo: 11:05

Photographer: Sami Doupnik

Description: Ammonia in chlorine room at water plant



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Photograph Log

Photo No. 8

Location: D & M WSC TX1740010		
City: Douglass	County/Parish: Nacogdoches	State: Texas



Photo File Name: DSCN1554

Date of Photo: 03/01/2023

Time of Photo: 11:13

Photographer: Sami Doupnik

Description: Pressure relief valve at the top of the pressure tank



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Photograph Log

Photo No. 9

Location: D & M WSC TX1740010		
City: Douglass	County/Parish: Nacogdoches	State: Texas



Photo File Name: DSCN1555

Date of Photo: 03/01/2023

Time of Photo: 11:13

Photographer: Sami Doupnik

Description: Pressure tank at Douglass Plant



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Photograph Log

Photo No. 10

Location: D & M WSC TX1740010		
City: Douglass	County/Parish: Nacogdoches	State: Texas



Photo File Name: DSCN1556

Date of Photo: 03/01/2023

Time of Photo: 13:53

Photographer: Sami Doupnik

Description: New well at Eden Plant



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Photograph Log

Photo No. 11

Location: D & M WSC TX1740010		
City: Douglass	County/Parish: Nacogdoches	State: Texas



Photo File Name: DSCN1557

Date of Photo: 03/01/2023

Time of Photo: 13:54

Photographer: Sami Doupnik

Description: Chemical feed location at Eden Plant, rocks marking location



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Photograph Log

Photo No. 12

Location: D & M WSC TX1740010		
City: Douglass	County/Parish: Nacogdoches	State: Texas



Photo File Name: DSCN1558

Date of Photo: 03/01/2023

Time of Photo: 13:56

Photographer: Sami Doupnik

Description: Erosion at foundation of ground storage tank



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Photograph Log

Photo No. 13

Location: D & M WSC TX1740010		
City: Douglass	County/Parish: Nacogdoches	State: Texas



Photo File Name: DSCN1559

Date of Photo: 03/01/2023

Time of Photo: 13:57

Photographer: Sami Doupnik

Description: Discoloration from splashing from tank overflow



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Photograph Log

Photo No. 14

Location: D & M WSC TX1740010		
City: Douglass	County/Parish: Nacogdoches	State: Texas



Photo File Name: DSCN1560

Date of Photo: 03/01/2023

Time of Photo: 14:00

Photographer: Sami Doupnik

Description: Foundation erosion beneath storage tank



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
Photograph Log

Photo No. 15

Location: D & M WSC TX1740010		
City: Douglass	County/Parish: Nacogdoches	State: Texas



Photo File Name: DSCN1561

Date of Photo: 03/01/2023

Time of Photo: 14:05

Photographer: Sami Doupnik

Description: Chemical storage tank in secondary containment



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Photograph Log

Photo No. 16

Location: D & M WSC TX1740010		
City: Douglass	County/Parish: Nacogdoches	State: Texas



Photo File Name: DSCN1562

Date of Photo: 03/01/2023

Time of Photo: 14:24

Photographer: Sami Doupnik

Description: Well at Alazan Treatment Plant



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Photograph Log

Photo No. 17

Location: D & M WSC TX1740010		
City: Douglass	County/Parish: Nacogdoches	State: Texas



Photo File Name: DSCN1563

Date of Photo: 03/01/2023

Time of Photo: 14:25

Photographer: Sami Doupnik

Description: Electrical conduit on well open to casing



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Photograph Log

Photo No. 18

Location: D & M WSC TX1740010		
City: Douglass	County/Parish: Nacogdoches	State: Texas



Photo File Name: DSCN1564

Date of Photo: 03/01/2023

Time of Photo: 14:30

Photographer: Sami Doupnik

Description: Corrosion at top of overflow pipe



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Photograph Log

Photo No. 19

Location: D & M WSC TX1740010		
City: Douglass	County/Parish: Nacogdoches	State: Texas



Photo File Name: DSCN1565

Date of Photo: 03/01/2023

Time of Photo: 14:30

Photographer: Sami Doupnik

Description: Corrosion of overflow pipe



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Photograph Log

Photo No. 20

Location: D & M WSC TX1740010		
City: Douglass	County/Parish: Nacogdoches	State: Texas



Photo File Name: DSCN1566

Date of Photo: 03/01/2023

Time of Photo: 14:30

Photographer: Sami Doupnik

Description: Zoomed in view of corrosion at top of overflow pipe



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Photograph Log

Photo No. 21

Location: D & M WSC TX1740010		
City: Douglass	County/Parish: Nacogdoches	State: Texas



Photo File Name: DSCN1567

Date of Photo: 03/01/2023

Time of Photo: 14:31

Photographer: Sami Doupnik

Description: Paint peeling, rust, and biological matter seen inside overflow pipe or ground storage tank



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Photograph Log

Photo No. 22

Location: D & M WSC TX1740010		
City: Douglass	County/Parish: Nacogdoches	State: Texas



Photo File Name: DSCN1568

Date of Photo: 03/01/2023

Time of Photo: 14:31

Photographer: Sami Doupnik

Description: Paint peeling, rust, and biological matter seen inside overflow pipe or ground storage tank



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Photograph Log

Photo No. 23

Location: D & M WSC TX1740010		
City: Douglass	County/Parish: Nacogdoches	State: Texas



Photo File Name: DSCN1569

Date of Photo: 03/01/2023

Time of Photo: 14:33

Photographer: Sami Doupnik

Description: Rust on lid of overflow on ground storage tank



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Photograph Log

Photo No. 24

Location: D & M WSC TX1740010		
City: Douglass	County/Parish: Nacogdoches	State: Texas



Photo File Name: DSCN1570

Date of Photo: 03/01/2023

Time of Photo: 14:35

Photographer: Sami Doupnik

Description: Hole seen on underside of overflow pipe on ground storage tank



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Photograph Log

Photo No. 25

Location: D & M WSC TX1740010		
City: Douglass	County/Parish: Nacogdoches	State: Texas



Photo File Name: DSCN1571

Date of Photo: 03/01/2023

Time of Photo: 14:39

Photographer: Sami Doupnik

Description: Exhaust fan in chlorine room



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Photograph Log

Photo No. 26

Location: D & M WSC TX1740010		
City: Douglass	County/Parish: Nacogdoches	State: Texas



Photo File Name: DSCN1572

Date of Photo: 03/01/2023

Time of Photo: 14:41

Photographer: Sami Doupnik

Description: Maintenance records on paint of pump



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Photograph Log

Photo No. 27

Location: D & M WSC TX1740010		
City: Douglass	County/Parish: Nacogdoches	State: Texas



Photo File Name: DSCN1573

Date of Photo: 03/01/2023

Time of Photo: 14:51

Photographer: Sami Doupnik

Description: Double walled storage tank



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Photograph Log

Photo No. 28

Location: D & M WSC TX1740010		
City: Douglass	County/Parish: Nacogdoches	State: Texas



Photo File Name: DSCN1574

Date of Photo: 03/01/2023

Time of Photo: 14:54

Photographer: Sami Doupnik

Description: Key permanently located in chemical storage room



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Photograph Log

Photo No. 29

Location: D & M WSC TX1740010		
City: Douglass	County/Parish: Nacogdoches	State: Texas



Photo File Name: DSCN1575

Date of Photo: 03/01/2023

Time of Photo: 14:55

Photographer: Sami Doupnik

Description: Secondary containment in chemical room